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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,268	09/28/2001	E. David Neufeld	COMP:0222	5215

7590 10/13/2006

Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Ft. Collins, CO 80527-2400

EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/967,268

Applicant(s)

NEUFELD, E. DAVID

Examiner

Andrew L. Nalven

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-15, 17, 18, 20-30 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15, 17, 18, 20-30, 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 10-15, 17-18, 20-30, and 32-35 are pending.

Response to Arguments

2. Applicant's arguments filed 17 July 2006 have been fully considered but they are moot in view of the new grounds of rejection.

Drawings

3. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when before the application is issued.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 24-30 and 32-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The cited claims provide an "if" step whereby if the second program is not verified, the first program is reloaded from the execution memory into the storage memory. However, the cited claims do not provide limitations

directed towards the result of a positive verification of the second program. As a result, the scope of the claimed invention is indefinite.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevis et al US Patent No. 6,581,159 in view of Beaverton et al US Patent No. 5,210,854.

7. With regards to claim 10, Nevis teaches a host computer (Nevis, Figure 2 "Firmware"), an appliance server coupled to the host computer where the appliance server has a storage memory and an execution memory (Nevis, Figure 2 "User Mode"), a control operably coupled to the appliance server and to the storage memory to control storage of programs into the storage memory (Nevis, Figure 2, Item 260, Transfer control to firmware), the appliance server being adapted to determine if a program is operable and to signal the control to permit the appliance server to storage a program in

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the storage memory (Nevis, Figure 2 Item 260, column 4 lines 34-56). Nevis fails to teach the security device being a switch wherein an enable signal is necessary to allow storage. However, Beaverton teaches a security device operably coupled to the control, the security device being adapted to signal the control to permit the host computer to store a program in the storage memory and the security device being a switch wherein the program is stored in storage memory only if the switch is enabled (Beaverton, column 4 lines 60-67). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Beaverton's switch method with Nevis' secure BIOS update system because it offers the advantage of providing a hardware check on BIOS updates that lessens the chance of an unintentional BIOS update that could cause a total system loss (Beaverton, column 2 lines 15-30).

8. With regards to claim 11, Nevis as modified teaches the act of more permanently loading comprises the act of loading the boot block program into read only memory (Nevis, column 3 line 65 – column 4 line 5).

9. With regards to claims 12-13, Nevis as modified teaches the act of more permanently loading comprises the act of flashing the boot block into flash memory (Nevis, column 3 line 65 – column 4 line 5).

10. With regards to claim 14, Nevis as modified teaches the act of temporarily loading comprises loading the boot block program into a random access memory (Nevis, column 5 lines 4-7).

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11. With regards to claim 15, Nevis as modified teaches the act of temporarily loading comprises loading the boot block program into volatile memory (Nevis, column 5 lines 4-7).

12. Claims 17-18, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevis et al US Patent No. 6,581,159 in view of Spiegel et al US Patent No. 6,711,675.

13. With regards to claims 17, Nevis teaches everything that is described above with reference to claim 10 including a host computer (Nevis, column 3 lines 55-60, server located on the internet), but fails to teach verifying a program of an appliance server and loading a replacement program. Spiegel teaches verifying a program (Spiegel, column 4 lines 38-39) and if not verified, signaling a host computer to load a replacement program into the appliance server (Spiegel, column 4 lines 40-43, locates update block and loads update block, firmware hub is applicant server). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Spiegel's authentication and replacement steps with Spiegel's method of updating a BIOS because it offers the advantage of allowing reprogramming if tampering is detected (Spiegel, column 1 lines 34-55).

14. With regards to claim 18, Nevis as modified above teaches verifying comprising authenticating the program (Spiegel, column 4 lines 38-39).

15. With regards to claim 20, Nevis as modified above teaches act of signaling comprising enabling a security switch (Spiegel, column 4 lines 38-46).

16. With regards to claim 21, Nevis as modified above teaches determining whether a security switch has enabled the host computer to load the replacement program into the applicant server (Spiegel, column 4 lines 42-43).

17. With regards to claim 22, Nevis as modified above teaches the program comprising a boot block program (Spiegel, column 4 lines 38-46, bios).

18. With regards to claim 23, Nevis as modified above teaches the program comprising firmware (Spiegel, column 2 lines 22-36).

19. Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevis et al US Patent No. 6,581,159 in view of Holtey US Patent No. 5,491,827 and Spiegel et al US Patent No. 6,711,675.

20. With regards to claim 34, Nevis teaches all that is described above and further teaches the loading of the program over a network connection (Nevis, column 3 lines 51-58, Internet), and if the network connection fails, re-establishing the network connection and once the network connection is re-established, continuing to load the program into the memory over the re-established network connection (Nevis, column 3 lines 51-58, Internet). Nevis fails to teach the authenticating of a user directing the loading of the program and continuing to load comprising re-authenticating the user and that if the verification fails, loading a replacement program into the appliance server from a host computer. Holtey teaches the authenticating of a user directing the loading of the program (Holtey, column 6 lines 1-20) and continuing to load comprising re-authenticating the user (Holtey, column 6 line 62 – column 7 line 6). Spiegel teaches

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verifying a program (Spiegel, column 4 lines 38-39) and if not verified, signaling a host computer to load a replacement program into the appliance server (Spiegel, column 4 lines 40-43, locates update block and loads update block, firmware hub is applicant server). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Holtey's authentication mechanism and utilize Spiegel's authentication and replacement steps with Nevis's BIOS update system because it offers the advantage of helping protect configuration information used for power-up or startup of a system (Holtey, column 3 lines 1-14) and the advantage of allowing reprogramming if tampering is detected (Spiegel, column 1 lines 34-55).

21. With regards to claim 35, Nevis as modified above teaches the act of more permanently loading comprises the act of flashing the boot block into flash memory (Nevis, column 3 line 65 – column 4 line 5).

Allowable Subject Matter

22. Claims 24-30 and 32-33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

23. The following is an examiner's statement of reasons for allowance: The cited prior art, Nevis and Spiegel, fail to teach that that during operation of a first program in execution memory wherein the first program is also stored in the storage memory, replacing that first program in the storage memory with a second program, verifying the second program, and if verification fails, reloading the first program into the storage

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memory from the execution memory. As a result, the cited prior art fails to anticipate or render obvious the above cited claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571 272 6962. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



KAMBIZ ZAND
PRIMARY EXAMINER